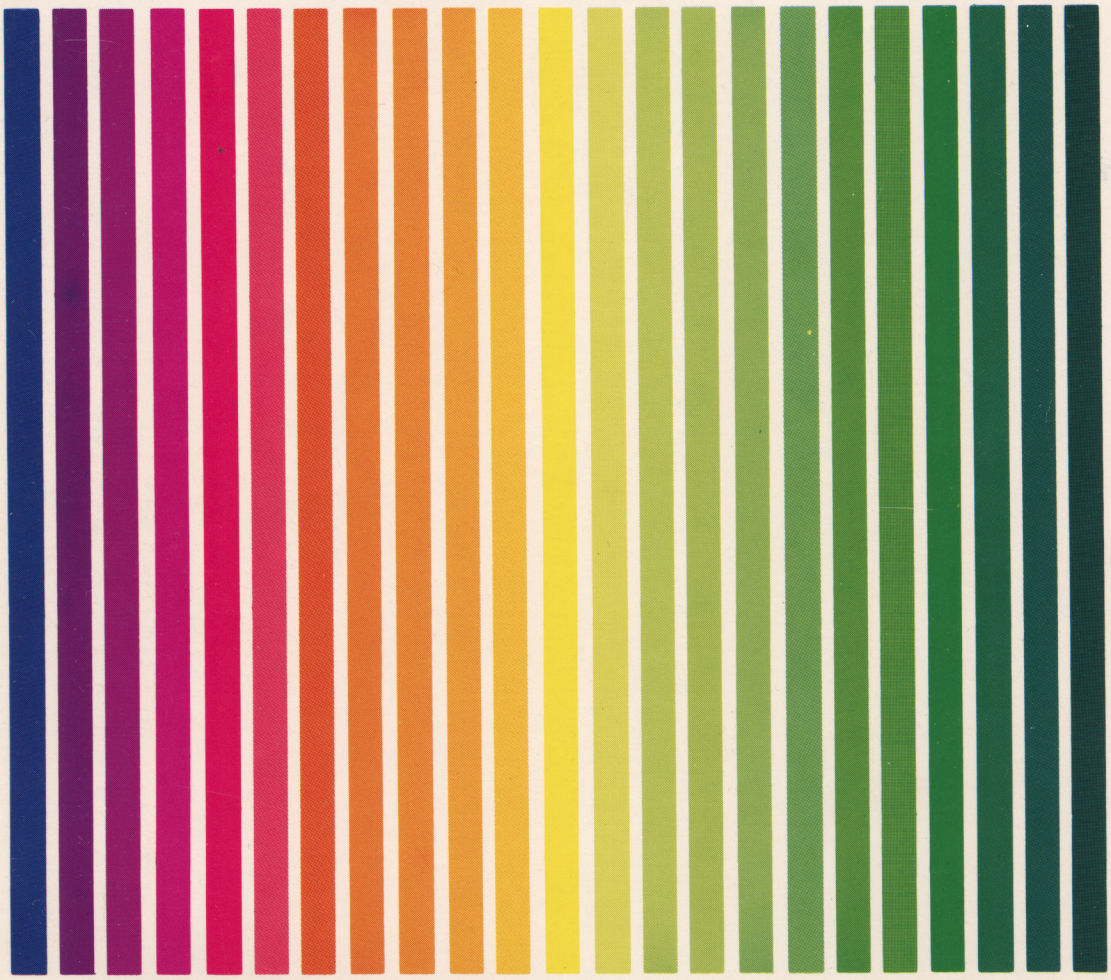
APX ATARI® PROGRAM EXCHANGE



Dennis Harkins

MESSAGE DISPLAY

A multifeatured video message system

Cassette: 32K (APX-10153)

Diskette: 40K (APX-20153)

User-Written Software for ATARI Home Computers

Dennis Harkins

MESSAGE DISPLAY

A multifeatured video message system

Cassette: 32K (APX-10153) Diskette: 40K (APX-20153)

Copyright
software
this software

RELEASE 1.36 - 17 JAN 84

MESSAGE DISPLAY PROGRAM

by

Dennis J. Harkins

Program and Manual Contents © 1982 Dennis J. Harkins

Copyright notice. On receipt of this computer program and associated documentation (the software), the author grants you a nonexclusive license to execute the enclosed software. This software is copyrighted. You are prohibited from reproducing, translating, or distributing this software in any unauthorized manner.

TRADEMARKS OF ATARI

The following are trademarks of Atari, Inc.

ATARI
ATARI 400 Home Computer
ATARI 800 Home Computer
ATARI 410 Program Recorder
ATARI 810 Disk Drive
ATARI 820 40-Column Printer
ATARI 822 Thermal Printer
ATARI 825 80-Column Printer
ATARI 830 Acoustic Modem
ATARI 850 Interface Module

****

Distributed by

The ATARI Program Exchange
P. O. Box 427
Sunnyvale, CA 94086

To request an APX Product Catalog, write to the address above, or call toll-free:

800/538-1862 (outside California)
800/672-1850 (within California)

Or call our Sales number, 408/745-5535.

****

CONTENTS

INTRODUCTION __ 1

Overview __ 1
Required accessories __ 1
Optional accessories __ 1
Contacting the author __ 1

GETTING STARTED __ 2

Loading MESSAGE DISPLAY PROGRAM into computer memory __ 2
First display screen __ 2

USING MESSAGE DISPLAY PROGRAM - THE MENU __ 3

1 WRITE PAGES __ 3
New or existing messages __ 3
Large or small characters __ 4
Choosing color combinations __ 4
Entering your message __ 5
Checking your message __ 6

2 LOAD PAGES __ 7
3 DISPLAY PAGES __ 8
4 PREVIEW PAGES __ 9
5 SAVE PAGES __ 9
6 CHANGE MESSAGE __ 10
7 CHANGE COLORS __ 10
8 CHANGE LOGO __ 10
9 DELETE PAGES __ 11
0 EXIT PROGRAM __ 11

TROUBLESHOOTING __ 12

Input errors __ 12
Saving a message set while revising
or erasing pages __ 12
Error codes and messages __ 12

TECHNICAL INFORMATION __ 13

ATARI color combinations __ 13
Line centering __ 14

INTRODUCTION

OVERVIEW

MESSAGE DISPLAY PROGRAM gives you many of the features of a commercial video message generator without the high cost. You can create up to fifty pages of automatically or manually cycled messages displayable on your computer's screen or over a closed-circuit television system. Each page can accommodate either ten or twenty automatically centered lines, depending on whether you select large or small characters. Each line can hold as many as twenty characters and you can edit your messages. The program comes with eight built-in combinations of letter and background colors, or you can specify your own combinations. The diskette version of MESSAGE DISPLAY includes a demonstration program containing ten screens.

REQUIRED ACCESSORIES

ATARI BASIC Language Cartridge

Cassette version

32K RAM
ATARI 410 Program Recorder

Diskette version

40K RAM
ATARI 810 Disk Drive

OPTIONAL ACCESSORIES

One Joystick Controller

CONTACTING THE AUTHOR

Users wishing to contact the author about MESSAGE DISPLAY PROGRAM may write to him at:

2349 E. Vine Street
Hatfield, PA 19440

GETTING STARTED

LOADING MESSAGE DISPLAY PROGRAM INTO COMPUTER MEMORY

1. Insert the ATARI BASIC Language Cartridge in the cartridge slot of your computer.

2. If you plan to use a Joystick Controller to control the speed with which pages display, plug it into the first (leftmost) controller jack at the front of your computer.

3. <u>If you have the cassette version:</u>

   a. Turn on your TV set.

   b. Turn on your computer and connect your program recorder to the computer and to a wall outlet.

   c. Slide the MESSAGE DISPLAY PROGRAM cassette into the program recorder's cassette holder and press REWIND on the recorder until the tape rewinds completely. Then press PLAY.

   d. Type CLOAD on your computer and then press the RETURN key two times. The tape will load into computer memory.

   e. After the tape finishes loading, the word READY will display on your TV screen. Type RUN and press the RETURN key.

<u>If you have the diskette version of:</u>

   a. Turn on your disk drive.

   b. When the BUSY light goes out, open the disk drive door and insert the MESSAGE DISPLAY PROGRAM diskette with the label in the lower right-hand corner nearest to you. Close the door.

   c. Turn on your computer and TV set. The program will load into computer memory and start automatically.

FIRST DISPLAY SCREEN

The title and copyright notice display for a few seconds followed by the menu of the activities.

USING MESSAGE DISPLAY PROGRAM--THE MENU

You use the menu to select the activities you want to perform. The menu looks like this:

```
                    CHOOSE OPTION

1 WRITE PAGES        6 CHANGE MESSAGE
2 LOAD PAGES         7 CHANGE COLORS
3 DISPLAY PAGES      8 CHANGE LOGO
4 PREVIEW PAGES      9 DELETE PAGES
5 SAVE PAGES         0 EXIT PROGRAM

OPTION NUMBER?
```

Figure 1 MESSAGE DISPLAY menu

To select an activity, press its corresponding number key (for example, press 1 to create new message pages). Each activity is explained in detail below.

1 WRITE PAGES

Use this selection to create your message pages. Each page is one screen. You'll find it helpful to use the layout sheet at the end of this manual to prepare your messages before entering them into the program. Good messages are written clearly and appear neat on the screen. Any extra effort in preparing messages always pays off in readability.

New or existing messages

When you select WRITE PAGES, the program asks you several questions. First, it asks whether you want to write new messages starting with page 1 or whether you want to add to an existing set of messages. The question is:

```
CHOOSE:  N TO WRITE NEW MESSAGES
    OR   A TO ADD TO EXISTING ONES
```

To start from scratch, press the N key. To add on to an existing set of message pages, press the A key and then indicate the page number you want to start with. If you specify a starting page number of an existing page, you won't be able to write the new page until you delete the old one. By entering a number greater than the number of your last page, you won't destroy the existing messages in a message set.

Large or small characters

Next, the program needs to know whether you want to use large or small letters. The message is:

LARGE OR SMALL LETTERS?

Press the L key to use large letters, or press the S key to use small ones. Small letters are half as tall as the large letters. You can put 20 lines of small letters or 10 lines of large letters on each page.

Choosing color combinations

You can display your messages in a wide variety of color combinations. You can choose any of the program's eight preset colors for uppercase letters, lowercase letters, and background, or you can create your own combination. The message is:

COLOR SELECTOR

ENTER THE LETTER OF YOUR CHOICE:

A BLUE ON GOLD (LOWER CASE IN GREEN)
B GOLD ON BLUE (LC IN RED)
C GOLD ON RED (LC IN GREEN)
D RED ON GOLD (LC IN GREEN)
E BLUE ON GREY (LC IN GREEN)
F RED ON GREY (LC IN GREEN)
G BLUE ON GREEN (LC IN GOLD)
H GREEN ON BLUE (LC IN GOLD)

TO MAKE A COMBINATION OF YOUR OWN,
TYPE I FOR INSTRUCTIONS

To select a preset color combination, press the corresponding letter (for example, press the B key to display uppercase letters in gold, lowercase letters in red, and a blue background). To create your own combination, press the I key. The program then guides you through the steps for selecting a custom combination. First, it displays your choices:

```
COLOR CHOICES    BRIGHTNESS

NEUTRAL  =0      BLACK         =0
GOLD     =1      DARK          =2
RED      =3      MEDIUM =4 OR 6
PURPLE   =5      MEDIUM LIGHT=8
BLUE     =8      VERY LIGHT   =12
GREEN    =12     WHITE         =14

ENTER THE NUMBER OF YOUR CHOICE
      THEN HIT RETURN

THE CHARACTER COLOR?
```

Through a series of questions, MESSAGE DISPLAY asks you to indicate your preferred character, background, lowercase, and inverse lowercase colors and the brightness of each. In response to each question, press the number corresponding to your color or brightness choice and press RETURN.

At first, it's much easier to use the eight preselected combinations. For more information on colors see "ATARI Color Combinations" in the "Technical Information" section at the end of this manual.

Entering your message

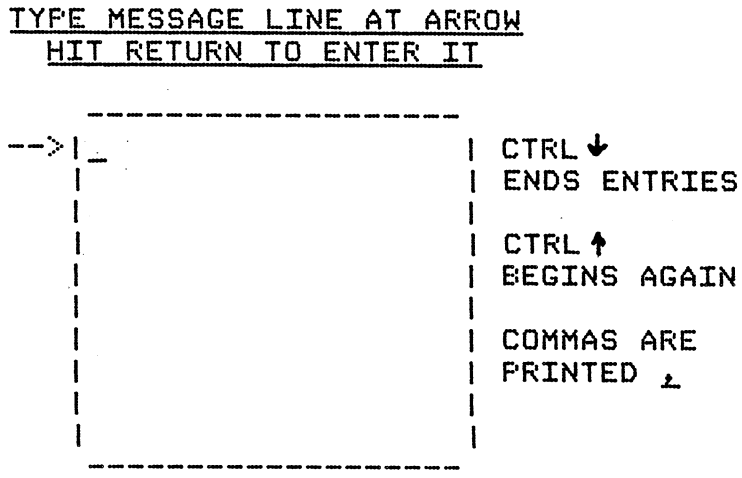
You're now ready to create a message page. The program displays brief instructions for writing your messages:

```
      MESSAGE WRITING INSTRUCTIONS

FOR SECOND COLOR -
  TYPE A LINE IN lower case

FOR FLASHING LETTERS -
  TYPE IN inverse lower case

TO LEAVE A BLANK LINE -
  HIT RETURN ON EMPTY LINE

  ALL LINES WILL BE AUTOMATICALLY
     CENTERED WHEN DISPLAYED

  HIT ANY KEY TO CONTINUE
```

A second color is available to add emphasis to words or lines in your message. To use this feature, press the CAPS/LOWER key before typing the word or line. The words appear in lower case as you type them, but in upper case when displayed. Press SHIFT and CAPS/LOWER at the same time to return to upper case. (Note. You should return to upper case before completing your message because the program doesn't respond to lower case except within a message.)

You can also add variety to your messages by using flashing characters. To obtain flashing characters, press the ATARI logo key to cause the characters to display in inverse vide. Press the ATARI logo key again to return to normal display. Inverse video characters don't flash at the time you enter them. Rather, they flash when you display your completed message using the DISPLAY PAGES selection.

After you press any key, the message entry screen displays:



You enter your message line by line. You can enter up to twenty characters per line. You may type any amount less than 20, of course, and the program automatically centers the letters on each line. (Note. It isn't possible to center an ODD number of characters evenly on a line containing room for 20 characters, since half spaces aren't possible. If you wish to defeat the automatic line centering, see the "Technical Information" section in this manual.)

The length of the message area depends on whether you select large or small characters. Press RETURN to leave any line blank and/or to move to the next line. For example, if you want to center a one-line message using large characters, press RETURN five times, enter your message on the sixth line, and press RETURN four times again. To return to the start of the message to revise anything, press the CTRL-up arrow keys.

If you selected large characters, the screen displays a READING SCREEN message after you enter the tenth line. If you selected small letters for that page, the program displays the message after the twentieth line. Or, you can end a shorter message by pressing the CTRL-down arrow keys.

Checking your message

After the program displays a message stating it is processing the page, it asks you whether you want to see the message in your

selected color combinations:

DO YOU WANT TO SEE THAT PAGE?(Y/N)

Press the Y key to see your message as it will appear when you run your message. Otherwise, press the N key. Next, if you look at the formatted message, the program asks you whether you want to make any changes to the page:

WOULD YOU LIKE TO MAKE CHANGES?(Y/N)

If you're satisfied with the message, press the N key. Otherwise, press the Y key, which causes the program to redisplay the message screen along with the message:

IF LINE HAS ERRORS - RETYPE LINE
HIT RETURN WHEN LINE IS CORRECT

If, for example, you want to change a word in the fourth line, press the RETURN key until the arrow points to line four and then retype that line. Then use the CTRL-down arrow keys to tell the program you're done with that page. The program then asks the same questions about whether you want to see your message and whether you want to make any changes. Once your message is satisfactory, the program asks you whether you want to create another page:

DO YOU HAVE ANOTHER PAGE?(Y/N)

Press the Y key to go on to another page. For each page, the program asks you to reselect your character size and color combinations, since you might want different ones on different screens. You can create up to fifty pages per message file. If this is your last page, press the N key to return to the menu.

2 LOAD PAGES

Use this selection to load an existing message file from cassette or diskette into computer memory. When you select LOAD PAGES, the program asks the source of the message file:

LOAD MESSAGE OPTION

LOAD FROM CASSETTE OR DISK?(C OR D)

Press the C key to load in a message file on cassette. The program guides you through the steps for loading in a cassette file. Or, press the D key to load in a message file on diskette. Again, the program guides you through the necessary steps. (Note. You'll need to know the filename of your message file as there's no way to list a diskette directory while you're in MESSAGE DISPLAY.)

When you're ready to return to the program menu, press the ESC key.

(Note. To load in the demonstration set of ten pages, use this option and type D in response to the CASSETTE OR DISK prompt and then type

DEMO.PGS

in response to the filename prompt.

3 DISPLAY PAGES

Use this selection to display a complete message file. The program asks you to respond to a series of questions as to how you want the messages to display. First, it asks:

MANUAL OR AUTOMATIC ADVANCE? (M/A)

If you want to control the speed with which each page displays, press the M key. Otherwise, press the A key to indicate you want the program to do the page cycling for you.

Then the program asks whether you want the characters you entered in inverse video to flash:

DO YOU WANT FLASHING LETTERS?(Y/N)

If you do, press the Y key; otherwise, press the N key.

Next, you indicate whether you want a short beep to accompany each page:

DO YOU WANT SOUND?(Y/N)

Press the Y key to use the sound option; otherwise, press the N key.

If you select automatic advance (A) in response to the first question, the program now asks whether you want to change the delay time between pages. If you answer Y , you may choose your own value within the range displayed.

Now you're ready to display your message pages. The program indicates the number of pages in your message file, along with a note to press the ESC key to stop the display and return to the menu. If you chose to control the page cycling yourself, you can do so either by pressing any key on the keyboard or by pressing the red button on your joystick.

4 PREVIEW PAGES

Use this selection to look at one page or all the pages in a message file, along with the page number for each. This option is helpful to review the messages in the program for changes and deletions. After you've seen all the messages, the total number of pages in use is displayed. The prompt is:

SINGLE PAGE OR ALL PAGES?(S/A)

Press the S key to indicate you want to look at a particular page. The program then asks you for the page number; enter the number and press RETURN. You can repeat this sequence to look at a number of pages in cases when you don't want to look through a complete set of pages.

Press the A key to look through all the pages in a set. The program then displays the messages in their normal running order, but you control the speed by pressing any key to cause the next page to display.

5 SAVE PAGES

Use this selection to save newly created messages or a file you've modified. Be sure to use SAVE PAGES before leaving the program; otherwise, you'll lose any work you've done since using this selection earlier in your MESSAGE DISPLAY session.

The program asks you whether you want to save your message file on cassette or diskette:

SAVE TO CASSETTE OR DISK? (C OR D)

Press the C key to indicate you want to use cassette, or press D to indicate you want to use a diskette. The program then guides you through the steps for saving your messages. To save a file on diskette, the program asks you for a filename. Using a filename extender such as " .PGS " to identify all message files is a good practice. For example, a typical filename might be JUNE1.PGS .

Make sure you use a different cassette or a different diskette filename than an existing message filename if you want to save both an original message set and a revised set. However, use the same cassette or diskette filename if you simply want to replace an out-of-date message set with an updated one (for example, a daily or weekly message board). Be sure the diskette you use has enough free sectors for your pages before you try to save your message set on it.

6 CHANGE MESSAGE

Use this selection to change spacing or typing errors and to edit existing messages.

The program asks you for the number of the page you want to change.

```
PAGE NUMBER?
```

Enter the number and press **RETURN**. It then displays the message area with the message of your specified page, along with the prompt:

```
IF LINE HAS ERRORS - RETYPE LINE
HIT RETURN WHEN LINE IS CORRECT
```

After revising your message as desired, the program asks you the same set of questions used in WRITE PAGES about looking at the formatted message and making changes.

7 CHANGE COLORS

Use this selection to revise the combinations of uppercase and lowercase letters and background colors on one or more pages at any time. The program asks you to indicate the page you want to revise:

```
PAGE NUMBER?
```

Enter the page number and press **RETURN**. The program displays the COLOR SELECTOR information it displays in WRITE PAGES and asks you to indicate your desired color combination. It then displays the page in your indicated combination and asks whether you want to change it again. When you're satisfied with the colors, return to the menu by responding N to the message ANOTHER COLOR CHANGE?(Y/N).

8 CHANGE LOGO

Use this selection to add a one- or two-line footer at the bottom of each page in a message file. This area is useful for identification and dates. The footer displays in inverse video. You'll also need to use this selection if you want this area to remain blank.

After you select CHANGE LOGO, the following information displays:

```
THE LOGO PROVIDES 2 LINES THAT WILL
APPEAR AT THE BOTTOM OF EVERY PAGE.

IF YOU WISH TO HAVE NO LOGO PRINTED,
TYPE BLANK SPACES IN THE LOGO LINES.

HIT 'ESC' FOR MENU.

  HIT ANY KEY TO CONTINUE.
```

After you press any key, the logo screen area displays in which you erase the preset message if you want nothing in this area or you replace the message with your own. When replacing the message, be sure to erase any letters remaining from the preset message if your message is shorter. You must center the logo in the logo screen area; the program doesn't do it for you automatically.

9 DELETE PAGES

Use this selection to erase pages you don't want to run any more. Page numbers don't change when you delete a page. For example, if you have messages on pages 1, 2, 3, and 4, and you delete page 3, then the program will run pages 1, 2, and 4. Deleting page 3 leaves room for another page to be added later in that spot. To do so, choose the WRITE PAGES option and indicate you want to add a page to existing ones. But remember to add only one page, or you'll destroy the existing page 4.

Warning. Don't erase more than three pages before saving your messages. You can then erase more, if necessary, and save the remainder again.

0 EXIT PROGRAM

Use this selection to end your session with MESSAGE DISPLAY. Be sure to use the SAVE PAGES selection before using EXIT PROGRAM if you want to use your message set again in the future. The program displays a reminder to save your work and asks whether you want to exit at this point:

```
WOULD YOU LIKE TO EXIT?(Y/N)
```

Press N if you change your mind; the program returns you to the menu. Otherwise, press N to return to the READY prompt in ATARI BASIC.

TROUBLESHOOTING

INPUT ERRORS

In most cases, the program won't accept incorrect information and the question simply repeats until you enter an acceptable response. Make sure the inverse video is off and your replies to prompts are in uppercase characters. You can use the BREAK key at any time to interrupt the program. Type RUN to restart the prgram.

If you make a mistake entering a line of a message page, use the DELETE/BACK S key to correct it before you press RETURN. Any time you interrupt the program while entering a page, you leave a half-written page and you must rewrite that page.

SAVING A MESSAGE SET WHILE REVISING OR ERASING PAGES

A serious problem exists, not with the program, but with the Operating System of the ATARI Computer. When you delete a large number of lines from a program, the keyboard sometimes "locks up" and won't respond to any input. The only solution is to turn the power off and reload the program. This means that you lose the program in memory, so it's good practice to save a copy of your messages before modifying or deleting more than 3 pages.

ERROR CODES AND MESSAGES

If there is any problem with a page, the program won't be able to DISPLAY PAGES beyond that page and an error message will appear at the bottom of the screen. Pressing SYSTEM RESET and typing RUN lets you erase and rewrite that page. An ERROR message occurring when you use DISPLAY PAGES usually means you tried to run more pages than you actually have. Type RUN to begin again.

TECHNICAL INFORMATION

ATARI COLOR COMBINATIONS

The ATARI computer is capable of generating many more colors than the options suggest. Chapter 9 of the Basic Reference Manual explains this in greater detail, and a little experimentation will give you some interesting effects.

The program also uses the additional two colors available to the GRAPHICS 1 and 2 display screen. Typing inverse-lowercase characters sets the color of the letter typed to that of the background and the luminance to that of the uppercase character in the eight preset color options. Inverse uppercase characters are set to aid line centering (described below).

You may notice that you can't put numbers and special characters in lowercase colors, because numbers have no "lower case." The following chart gives you numbers and most special characters in all colors.

KEYS FOR SPECIAL CHARACTER COLORS

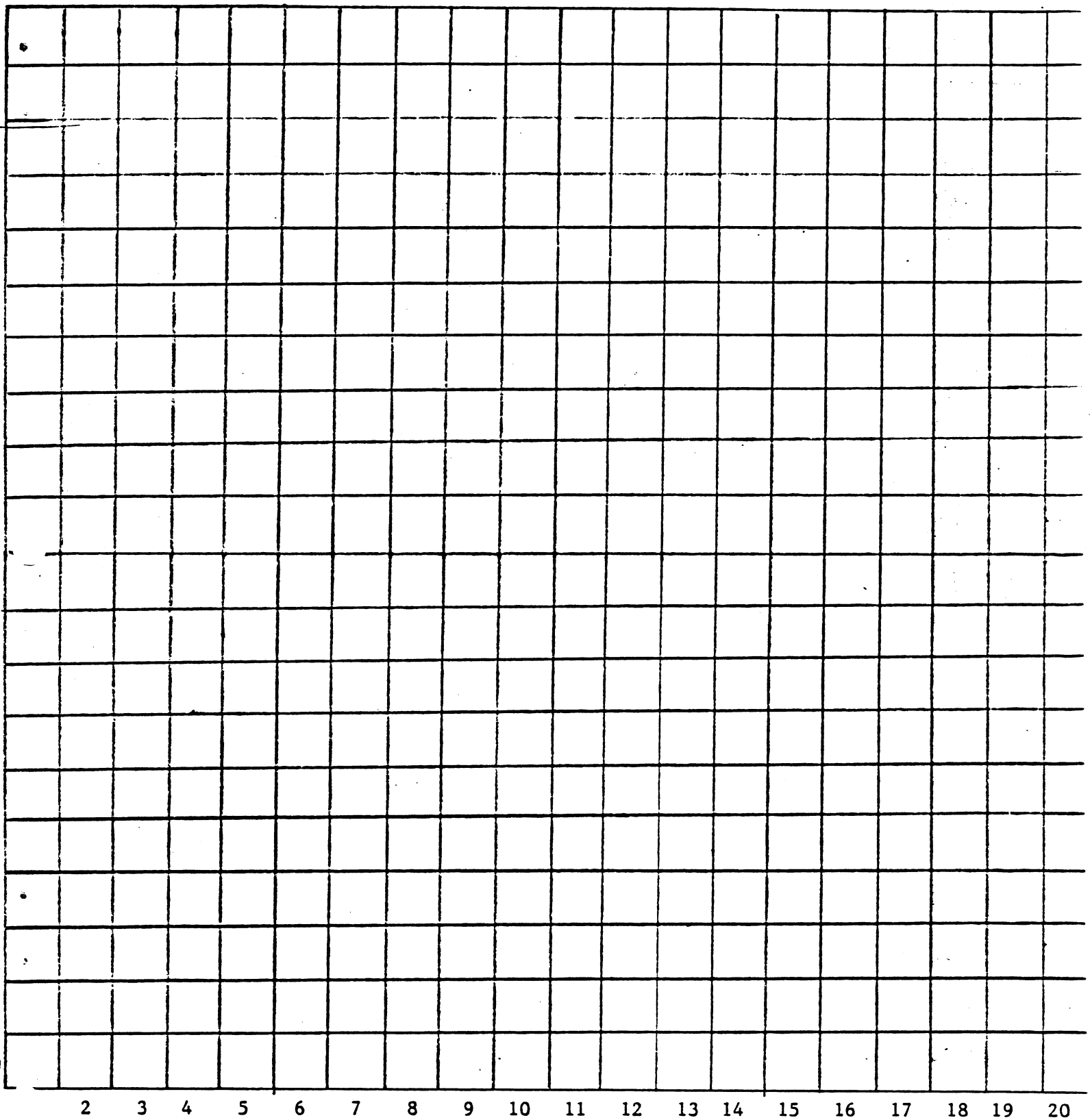
For lowercase color -> hold CTRL down
For inverse lower case -> turn inverse on
and hold CTRL down

To get this character	Use this key	To get this character	Use this key
1	Q	$	D
2	R	%	E
3	S	&	F
4	T	'	G
5	U	(	H
6	V	)	I
7	W	*	J
8	X	+	K
9	Y	,	L
0	P	-	M
!	A	.	N
"	B	/	O
#	C	:	Z

Inverse uppercase characters are set to the color and luminance of the background so they can be used to defeat automatic line centering.

LINE CENTERING

Inverse-uppercase characters are set to the color and luminance of the background so they can be used to defeat automatic line centering. Typing an inverse-uppercase character produces an invisible character in your message, so these characters can be used to right- or left-justify any line, and defeat the auto-centering feature. To left-justify a line, for example, type the message and fill the remaining spaces on the line with inverse characters.



MESSAGE PAGE LAYOUT SHEET

Use only ten lines for a message page using large letters.

LIMITED WARRANTY ON MEDIA AND HARDWARE ACCESSORIES.

We, Atari, Inc., guarantee to you, the original retail purchaser, that the medium on which the APX program is recorded and any hardware accessories sold by APX are free from defects for thirty days from the date of purchase. Any applicable implied warranties, including warranties of merchantability and fitness for a particular purpose, are also limited to thirty days from the date of purchase. Some states don't allow limitations on a warranty's period, so this limitation might not apply to you. If you discover such a defect within the thirty-day period, call APX for a Return Authorization Number, and then return the product along with proof of purchase date to APX. We will repair or replace the product at our option.

You void this warranty if the APX product: (1) has been misused or shows signs of excessive wear; (2) has been damaged by use with non-ATARI products; or (3) has been serviced or modified by anyone other than an Authorized ATARI Service Center. Incidental and consequential damages are not covered by this warranty or by any implied warranty. Some states don't allow exclusion of incidental or consequential damages, so this exclusion might not apply to you.

DISCLAIMER OF WARRANTY AND LIABILITY ON COMPUTER PROGRAMS.

Most APX programs have been written by people not employed by Atari, Inc. The programs we select for APX offer something of value that we want to make available to ATARI Home Computer owners. To offer these programs to the widest number of people economically, we don't put APX products through rigorous testing. Therefore, APX products are sold "as is", and we do not guarantee them in any way. In particular, we make no warranty, express or implied, including warranties of merchantability and fitness for a particular purpose. We are not liable for any losses or damages of any kind that result from use of an APX product.

ATARI PROGRAM EXCHANGE

REVIEW FORM

We're interested in your experiences with APX programs and documentation, both favorable and unfavorable. Many software authors are willing and eager to improve their programs if they know what users want. And, of course, we want to know about any bugs that slipped by us, so that the software author can fix them. We also want to know whether our documentation is meeting your needs. You are our best source for suggesting improvements! Please help us by taking a moment to fill in this review sheet. Fold the sheet in thirds and seal it so that the address on the bottom of the back becomes the envelope front. Thank you for helping us!

1. Name and APX number of program _____

2. If you have problems using the program, please describe them here.

_____

_____

_____

3. What do you especially like about this program?

_____

_____

_____

4. What do you think the program's weaknesses are?

_____

_____

_____

5. How can the catalog description be more accurate and/or comprehensive?

_____

_____

6. On a scale of 1 to 10, 1 being "poor" and 10 being "excellent", please rate the following aspects of this program?

_____ Easy to use
_____ User-oriented (e.g., menus, prompts, clear language)
_____ Enjoyable
_____ Self-instructive
_____ Useful (non-game software)
_____ Imaginative graphics and sound

7. Describe any technical errors you found in the user instructions (please give page numbers).

8. What did you especially like about the user instructions?

9. What revisions or additions would improve these instructions?

10. On a scale of 1 to 10, 1 representing "poor" and 10 representing "excellent", how would you rate the user instructions and why?

11. Other comments about the software or user instructions:

STAMP

ATARI Program Exchange
Attn: Publications Dept.
P.O. Box 50047
60 E. Plumeria Drive
San Jose, CA 95150

[seal here]